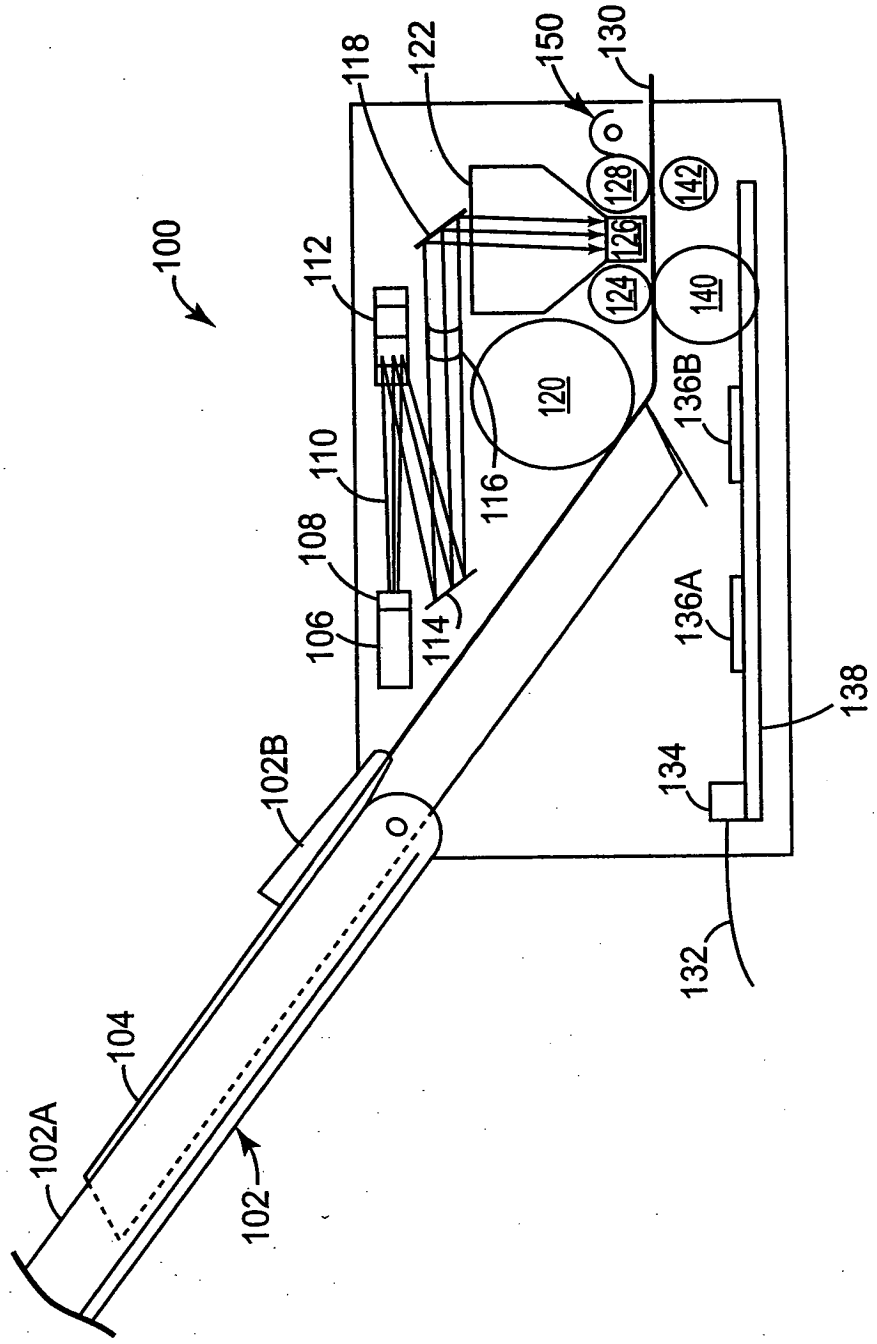
100
102
102A
102B
104
106
108
110
112
114
116
118
120
122
124
126
128
130
132
134
136A
136B
138
140
142
150

Fig. 1

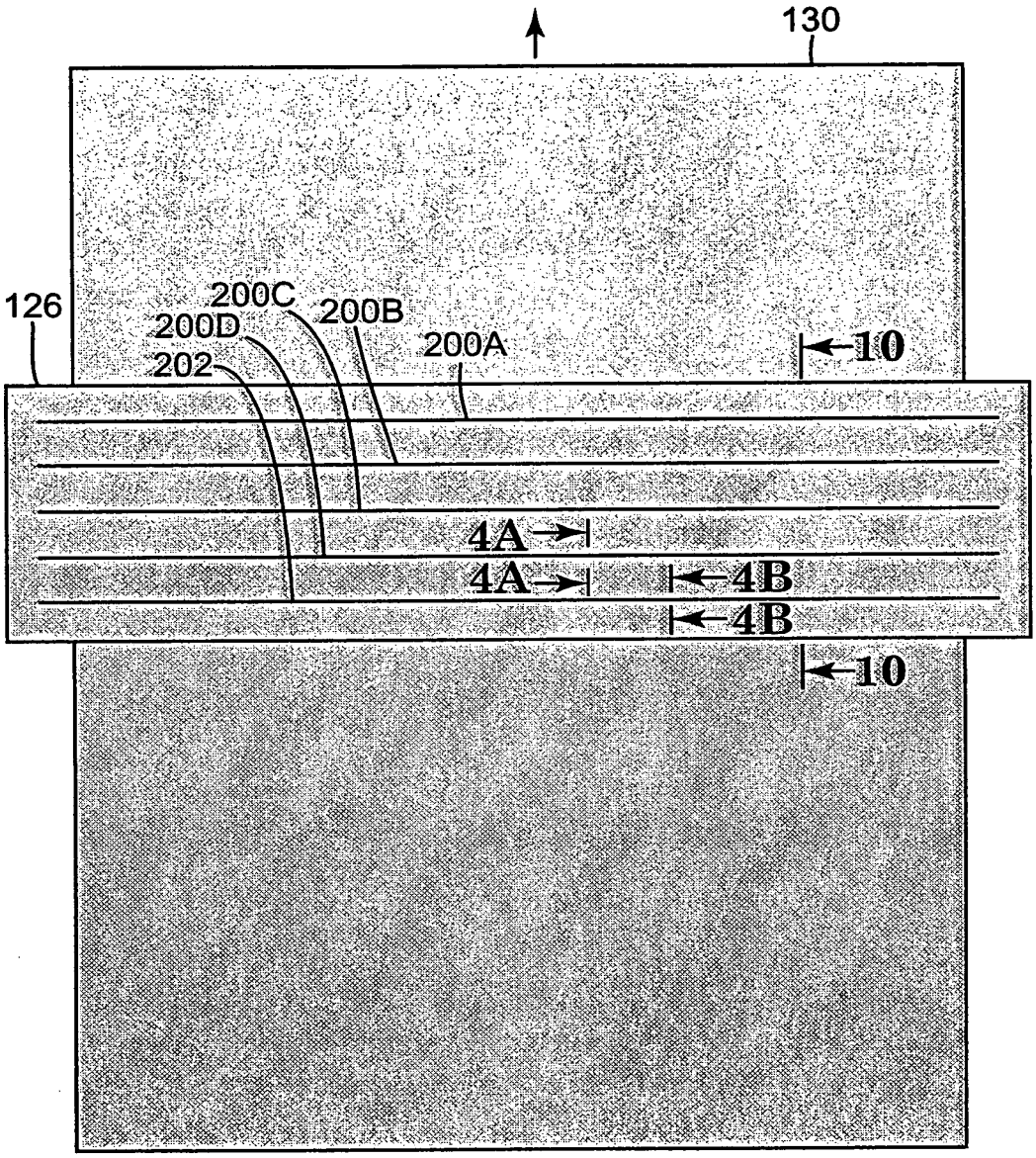

Fig. 2

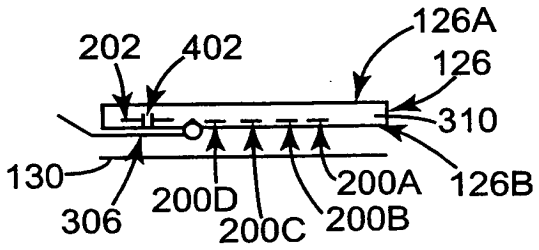
202
402
126A
126
310
130
306
200D
200C
200B
200A
126B

Fig. 3A

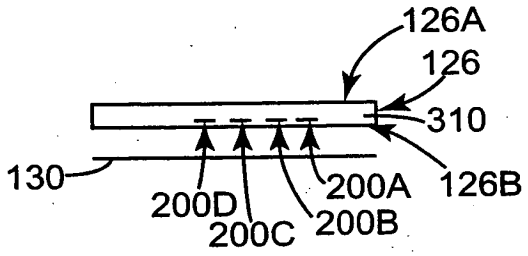
126A
126
310
130
200D
200C
200B
200A
126B

Fig. 3B

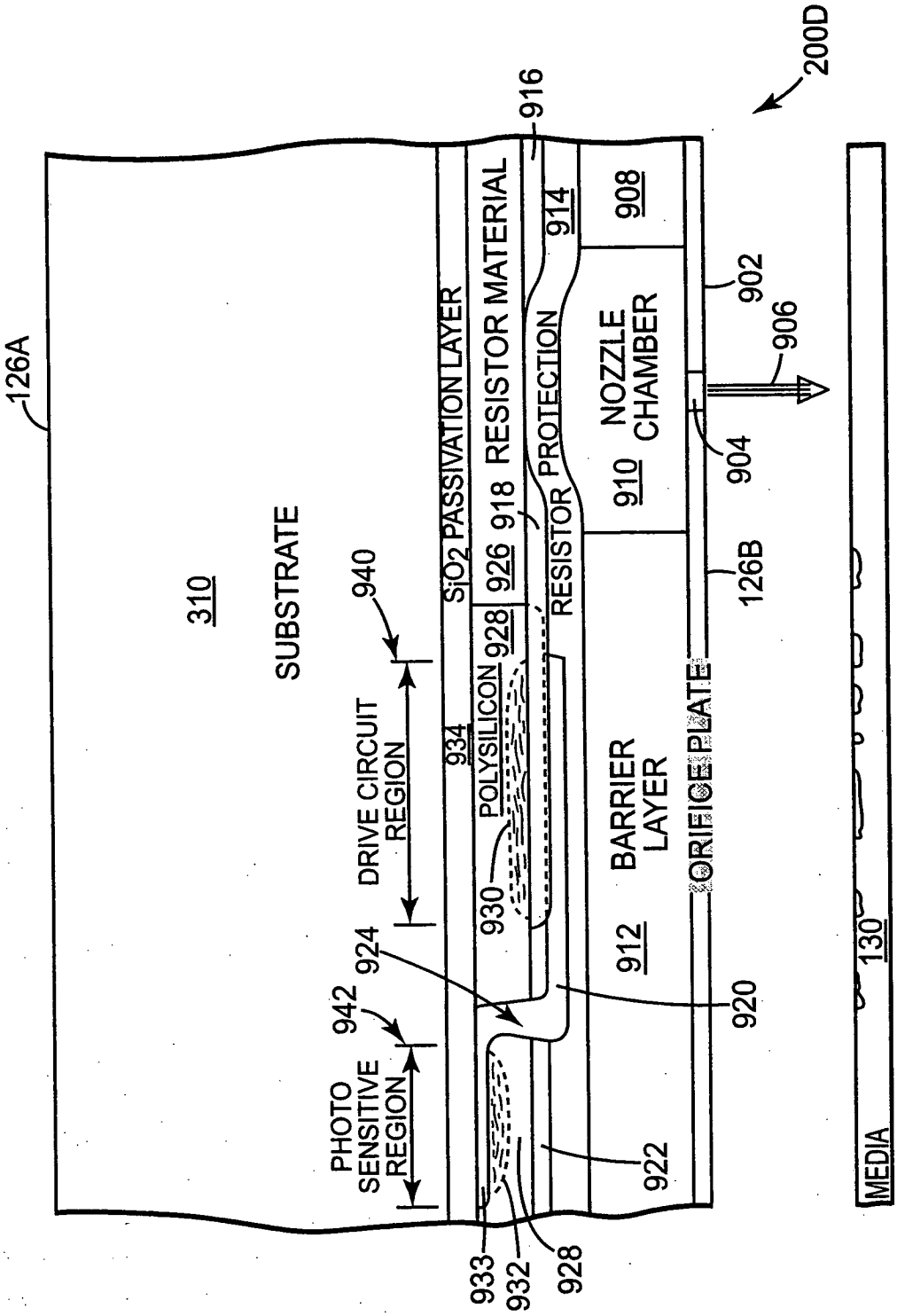
200D
916
126A
310
SUBSTRATE
940
SiO2 PASSIVATION LAYER
926
RESISTOR MATERIAL
914
908
902
906
NOZZLE CHAMBER
910
904
PROTECTION
928
RESISTOR
918
126B
DRIVE CIRCUIT REGION
934
POLYSILICON
930
BARRIER LAYER
912
ORIFICE PLATE
924
942
920
PHOTO SENSITIVE REGION
922
933
932
928
MEDIA
130

Fig. 4A

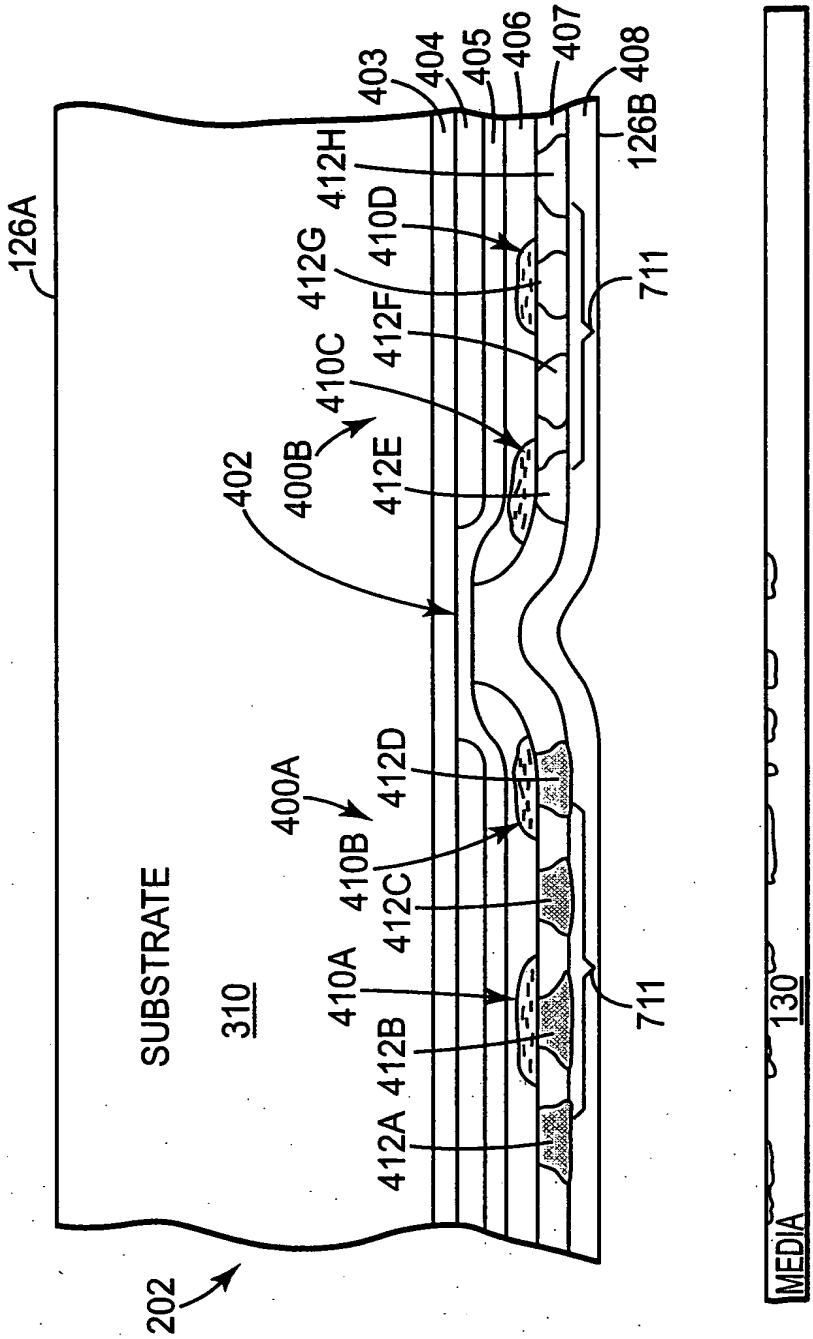
126A
403
404
405
406
407
408
126B
412H
410D
412G
412F
410C
400B
412E
402
711
400A
412D
410B
412C
410A
412B
412A
SUBSTRATE
310
202
130
MEDIA

Fig. 4B

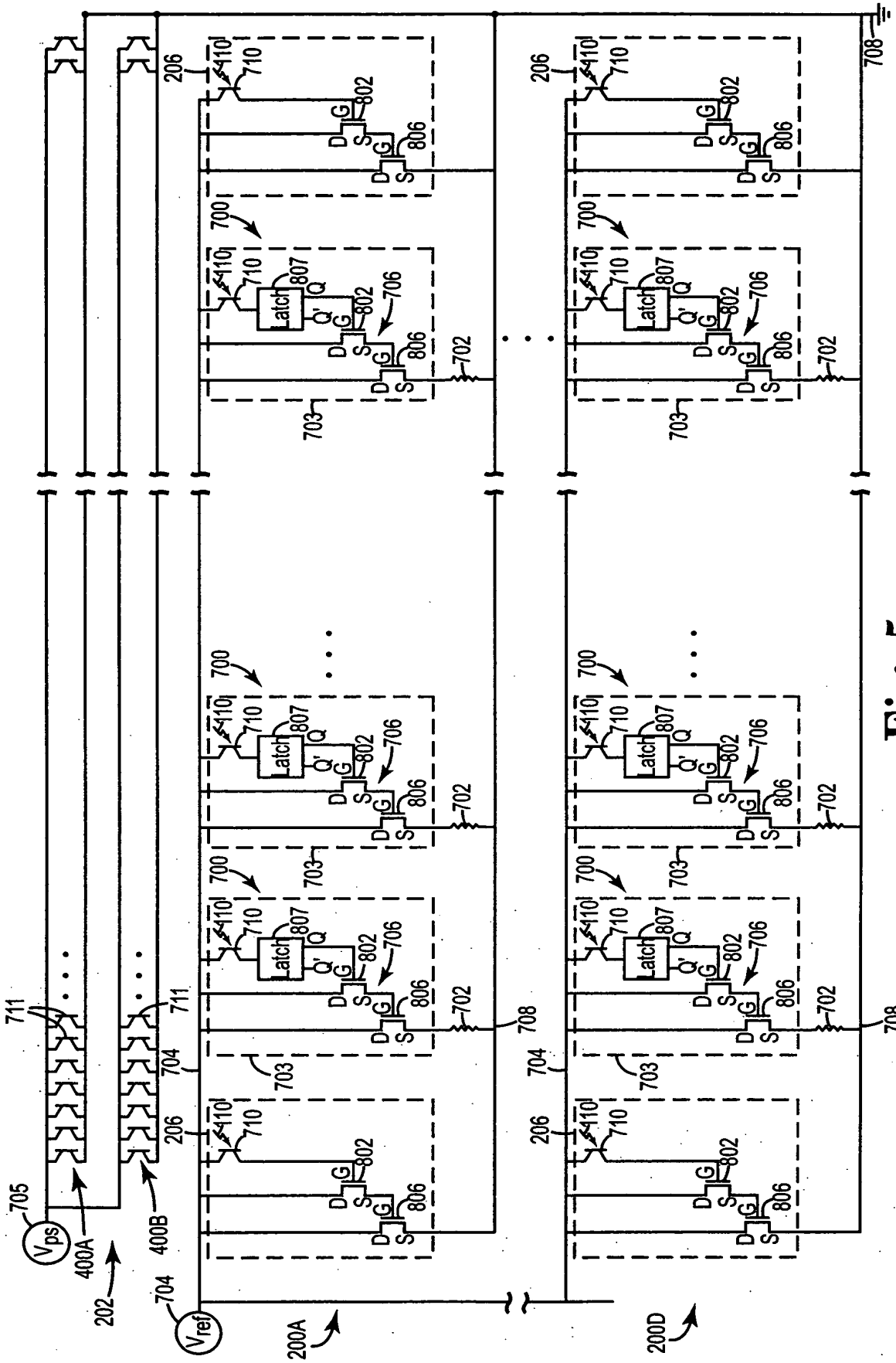
206
410
710
802
806
700
Latch
807
706
702
703
708
711
704
705
V_{ps}
V_{ref}
400A
400B
202
200A
200D

Fig. 5

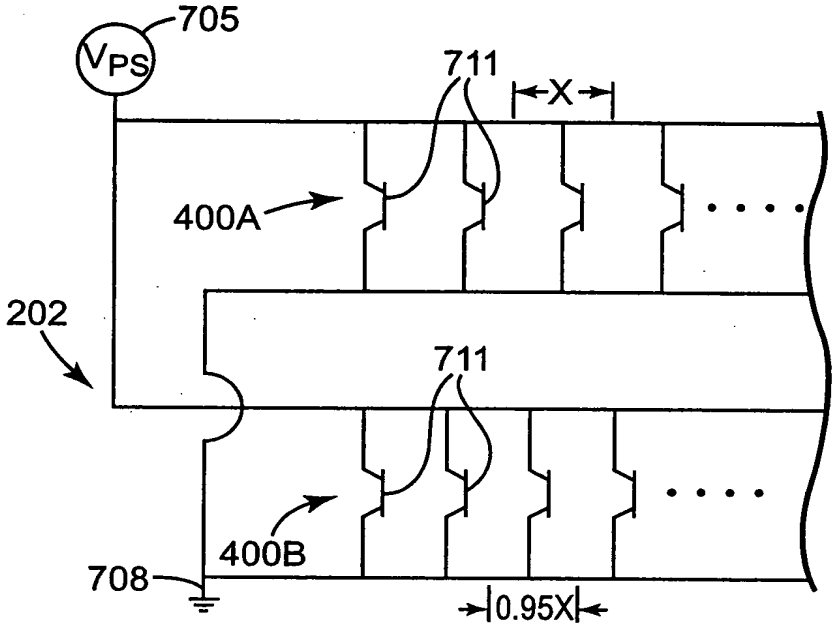
705
V_{PS}
711
X
400A
202
711
400B
708
0.95X

Fig. 6A

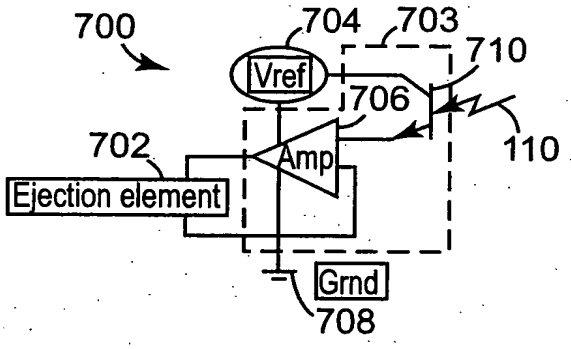
700
704
703
710
Vref
706
110
702
Amp
Ejection element
Grnd
708

Fig. 6B

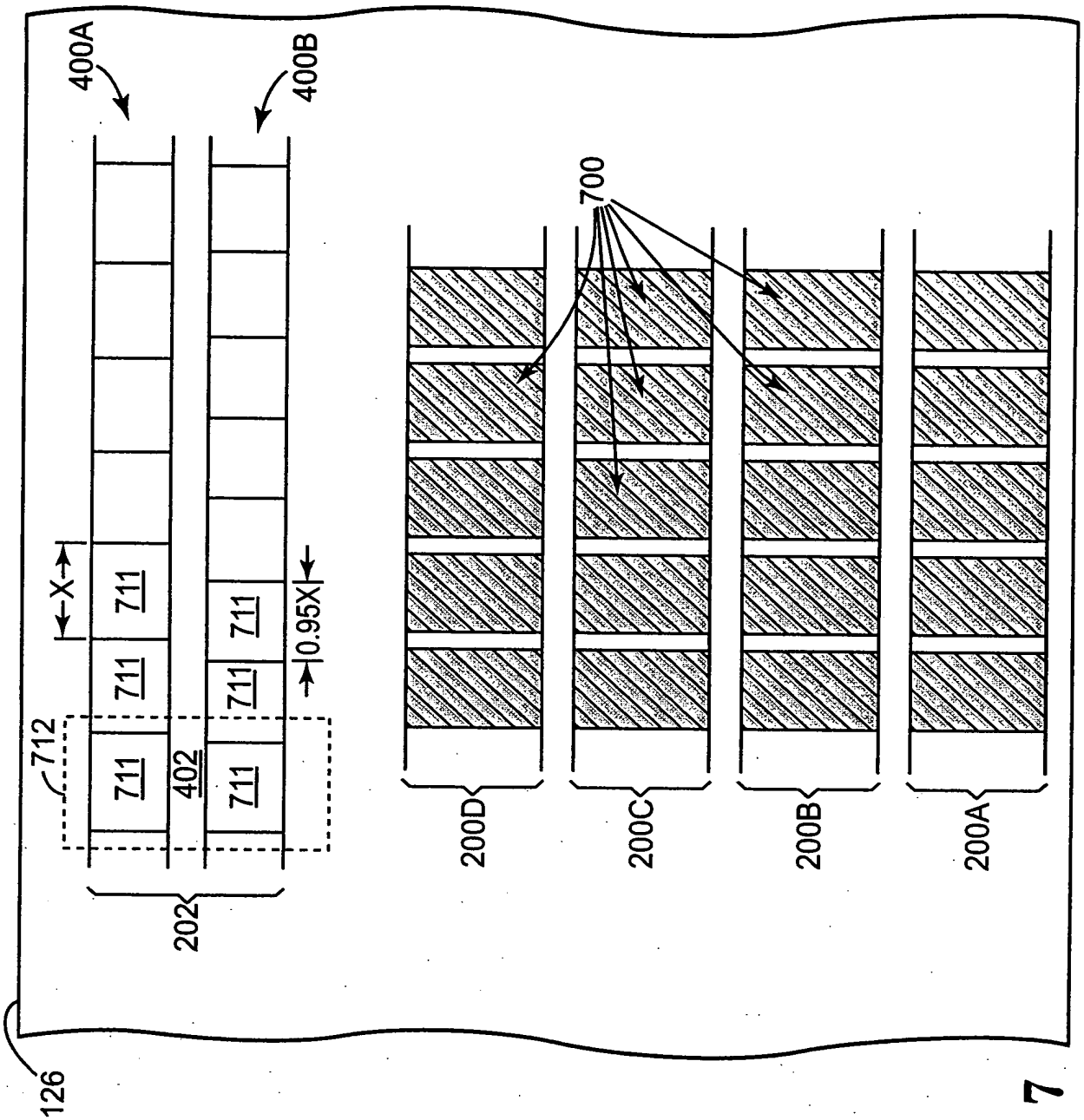

Fig. 7

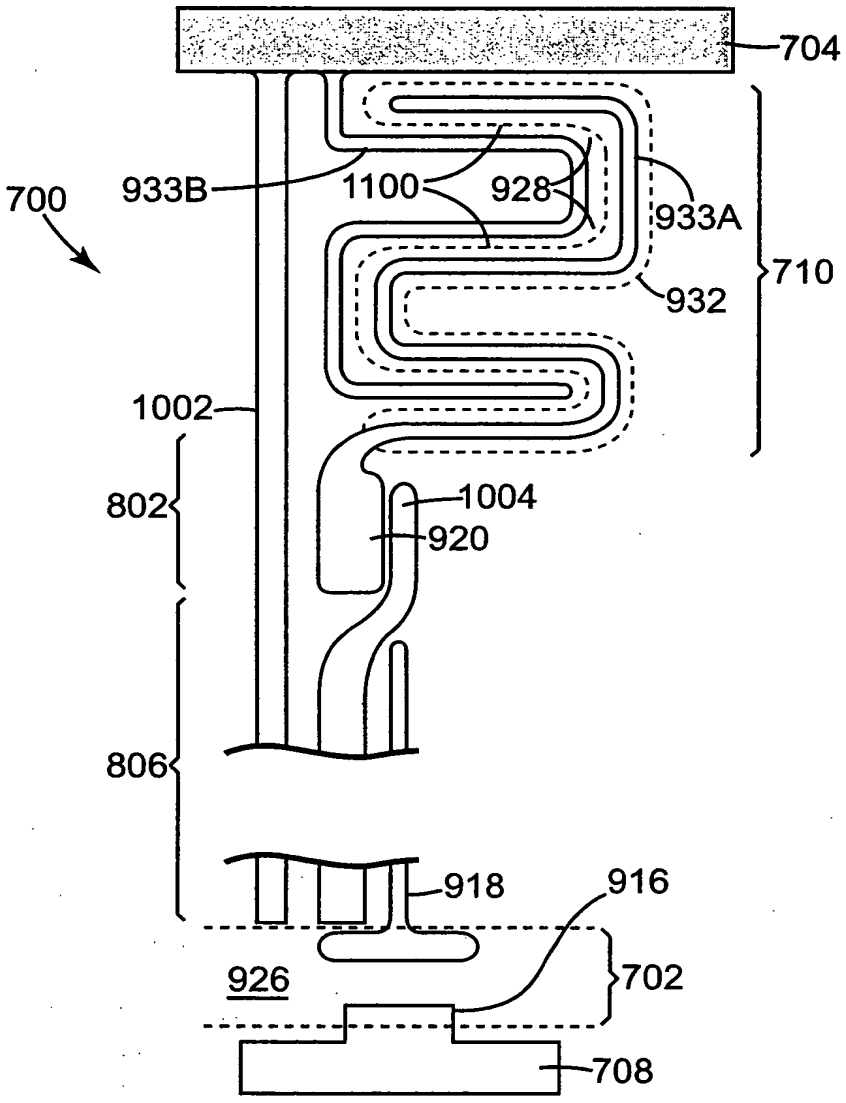
704
700
933B
1100
928
933A
710
932
1002
802
1004
920
806
918
916
926
702
708

Fig. 8A

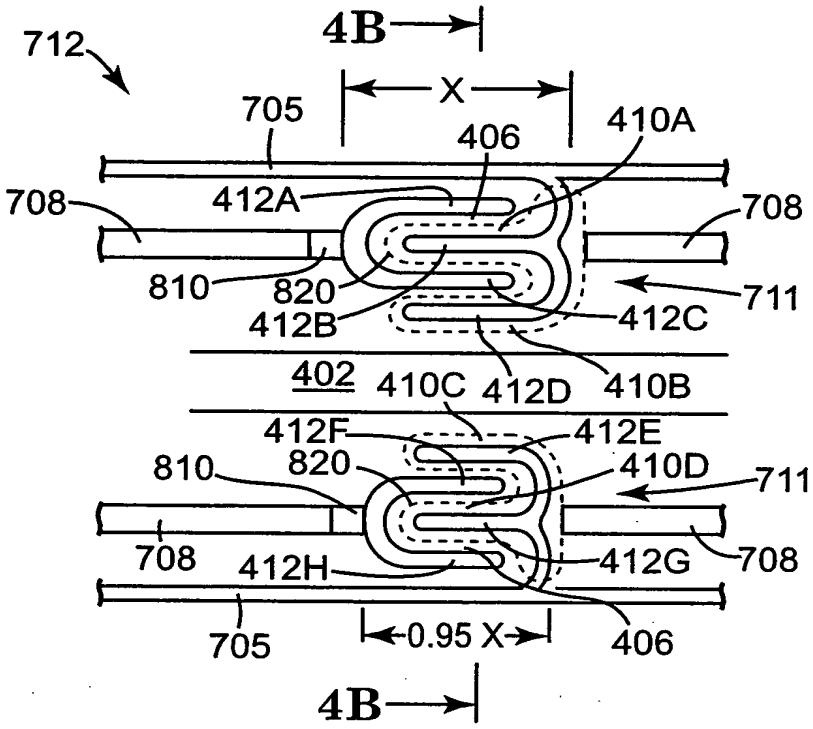
4B
712
X
705
406
410A
708
412A
708
810
820
711
412B
412C
402
410C
412D
410B
412F
412E
810
820
410D
711
708
412H
412G
708
705
0.95 X
406
4B

Fig. 8B

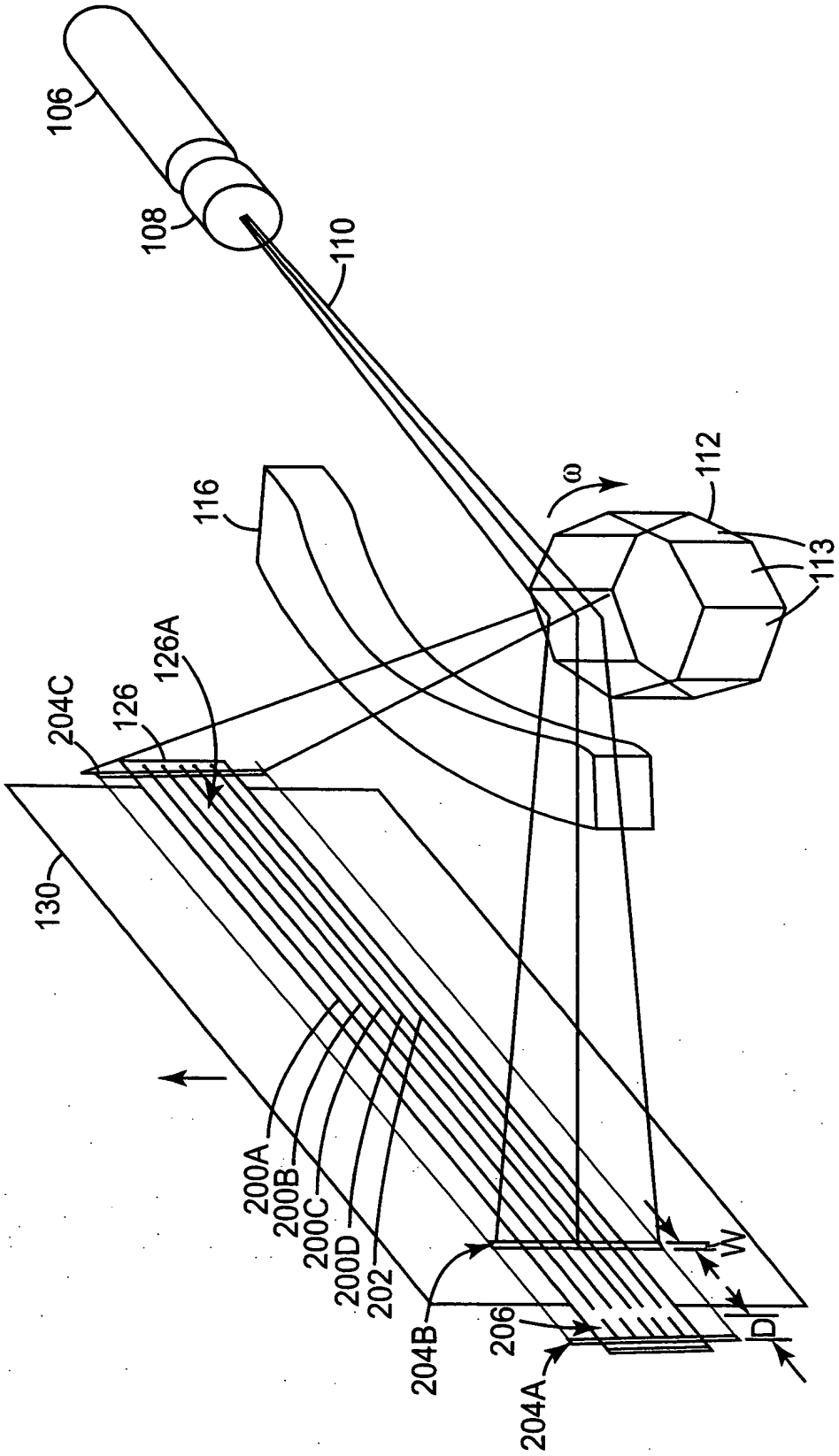
106
108
110
112
113
116
ω
126A
126
204C
130
200A
200B
200C
200D
202
204B
206
204A
W
D

Fig. 9A

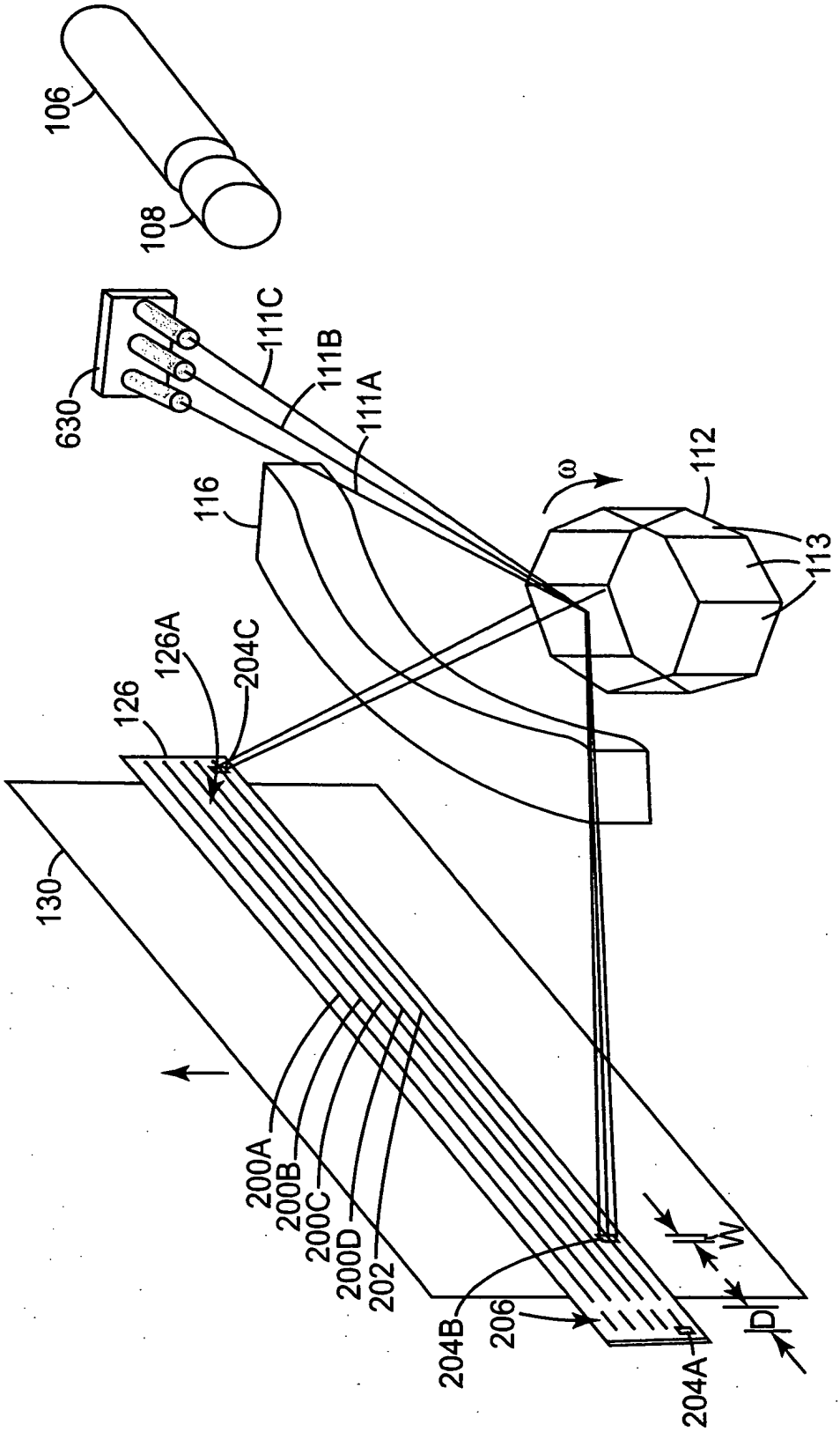
106
108
630
111C
111B
111A
116
112
ω
113
126A
204C
126
130
200A
200B
200C
200D
202
204B
206
204A
W
D

Fig. 9B

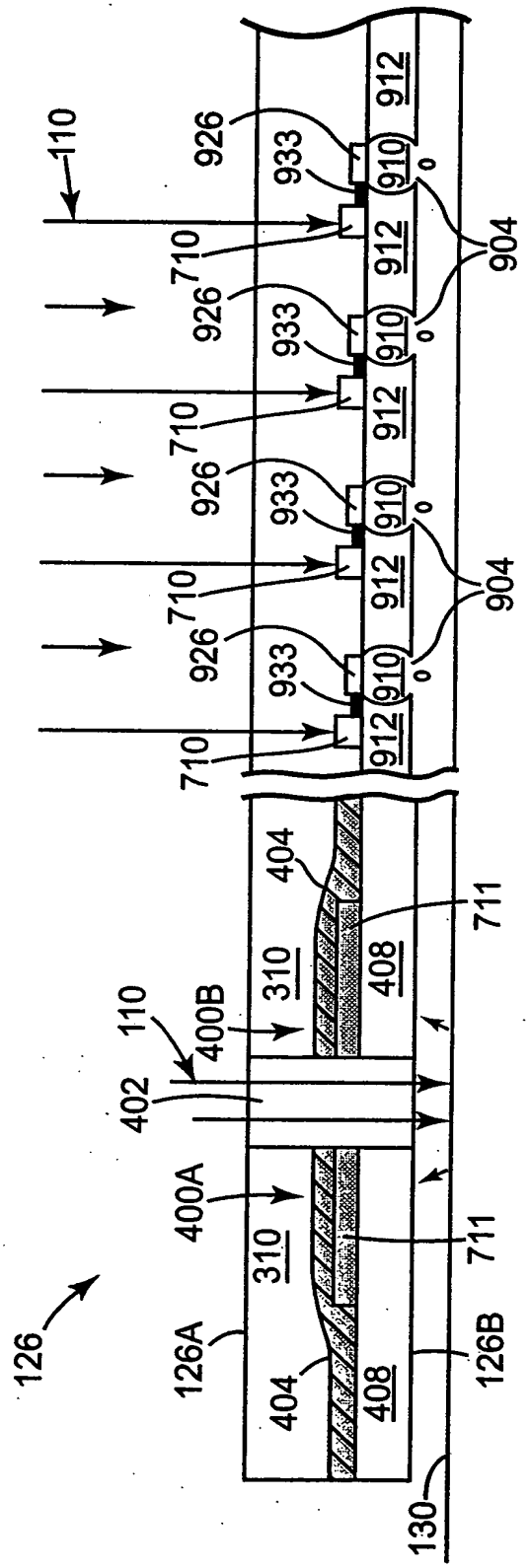
110
926
933
910
912
904
710
711
404
408
310
400B
400A
402
126
126A
126B
130

Fig. 10

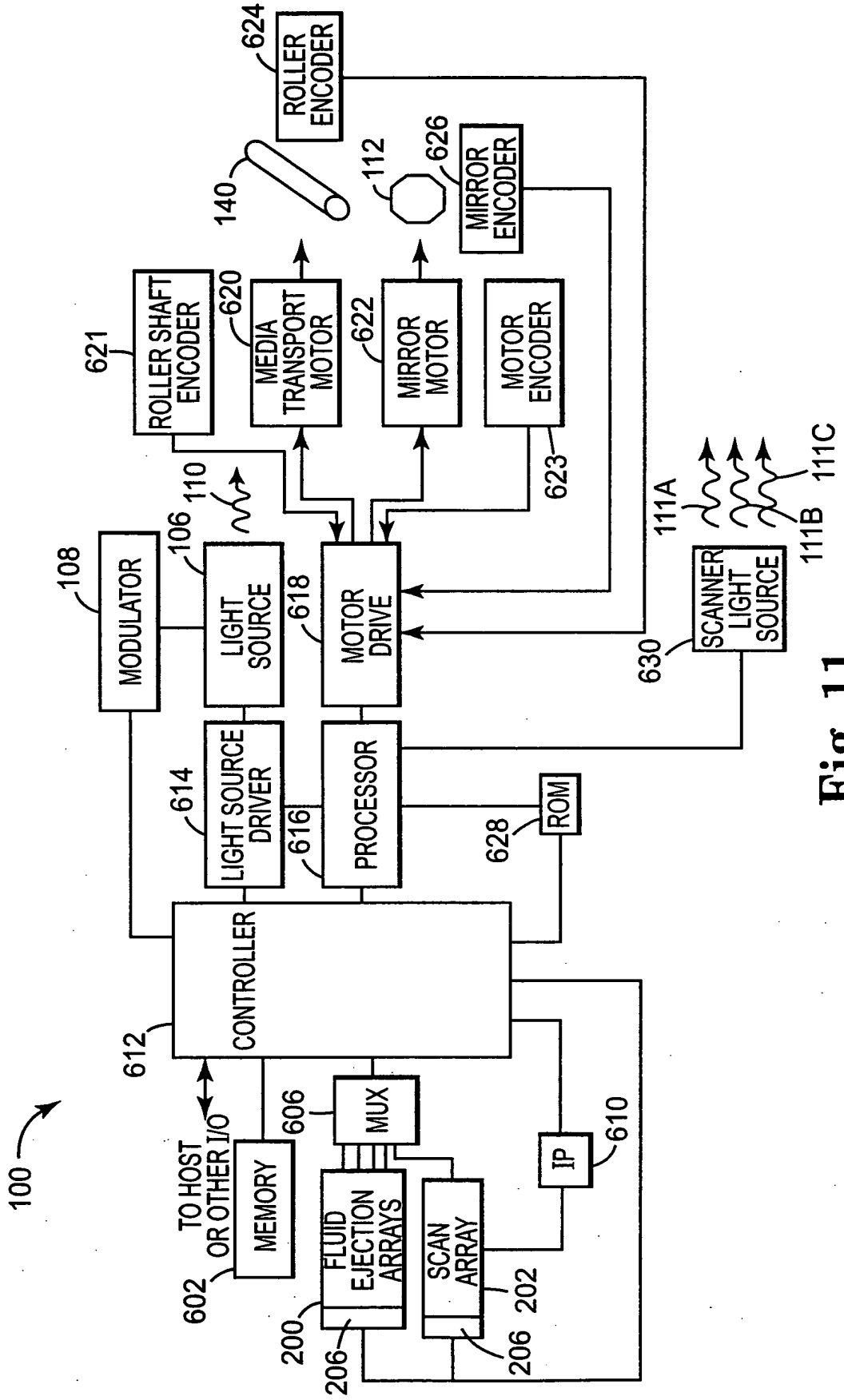
100
TO HOST OR OTHER I/O
602
MEMORY
606
MUX
610
IP
612
CONTROLLER
614
LIGHT SOURCE DRIVER
616
PROCESSOR
628
ROM
200
FLUID EJECTION ARRAYS
206
SCAN ARRAY
202
206
108
MODULATOR
106
LIGHT SOURCE
110
618
MOTOR DRIVE
111A
111B
111C
630
SCANNER LIGHT SOURCE
621
ROLLER SHAFT ENCODER
620
MEDIA TRANSPORT MOTOR
622
MIRROR MOTOR
623
MOTOR ENCODER
140
112
626
MIRROR ENCODER
624
ROLLER ENCODER

Fig. 11